

Edmonton, Public Health

Local Board
of Health
Annual Report
1947

LIBRARY OF THE UNIVERSITY
OF ALBERTA

Report

of the

Local Board of Health



THE CITY OF EDMONTON

ALBERTA

1947

BOARD OF HEALTH, 1947

Ald. C. E. Gariepy, Chairman

Dr. R. M. Shaw Ald. J. R. Munro Dr. E. A. Hay Roe

Prof. A. Stewart, Edmonton Public School Board

Mr. J. A. Gallant, Separate School Board

EX-OFFICIO MEMBERS

Mayor H. D. Ainlay

Dr. G. M. Little, M.O.H. Mr. A. W. Haddow, City Engineer

Catharine R. Rose, Secretary

1948

Ald. C. E. Gariepy, Chairman

Dr. R. M. Shaw Ald. G. E. Gleave Dr. E. A. Hay Roe

Dr. G. H. Brown, Edmonton Public School Board

Mr. J. A. Gallant, Separate School Board

EX-OFFICIO MEMBERS

Dr. G. M. Little, M.O.H. Mr. A. W. Haddow, City Engineer

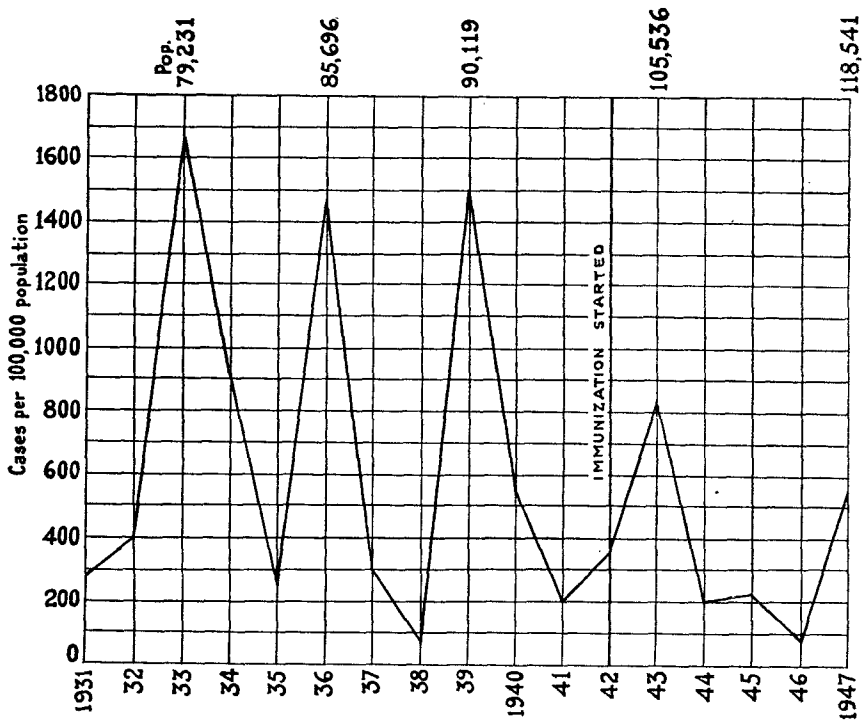
Catharine R. Rose, Secretary

STAFF

Medical Officer of Health.....	G. M. Little, M.D., D.P.H.
Secretary, Board of Health.....	Rose, Miss C. R.
Public Health Nurse, Sr.....	Griffith, Miss M., R.N.
Public Health Nurse, Sr.....	Christensen, Miss S. C., R.N.
Public Health Nurse, Sr.....	Thompson, Miss M. E., R.N.
Public Health Nurse.....	Lea, Miss T., R.N.
Public Health Nurse.....	Lesik, Mrs. R., R.N.
Public Health Nurse.....	Stewart, Miss I., R.N.
Chief Sanitary Inspector.....	Methuen, A. P., M.R., San. I.
Sr. Sanitary Inspector.....	Williams, J. D.
Sanitary Inspector.....	Alexander, L. G., C.I.S. (C.)
Sanitary Inspector.....	Chase, H. G., C.I.S. (C.)
Sanitary Inspector.....	Hill, G. B., C.I.S. (C.)
Sanitary Inspector.....	Kent, Wm., C.I.S. (C.)
Sanitary Inspector.....	Overton, L. B., C.I.S. (C.)
Quarantine Officer.....	R. T. Anderson
Meat Inspector.....	Morrison, Dr. D. M., V.S.
Dairy Supervisor.....	Ellinger, C.
Chemist and Milk Inspector.....	Graham, H. C., B.A.
Milk Inspector and Technician.....	Meredith, R. B., C.I.S. (C.)
Stenographer, Sr.....	Derbyshire, Miss K. D.
Stenographer.....	Chernichen, Miss M.
Stenographer.....	Craig, Miss I.
Clerk.....	Lang, Miss F.

CONTENTS:

Annual Report of M.O.H.	3
Financial Statement	5
Summary of Statistics	5
Vital Statistics	6
Infant Mortality	7
International List of Causes of Deaths.....	8, 9
Principal Causes of Deaths.....	10, 11
Isolation Hospital	11
School Medical Services	11
Immunization	11
Communicable Disease	12, 13, 14
Public Health Nursing	16
Health Inspection	17
Food Inspection	19
Dairy Inspection	21
Laboratory Report	21

WHOOPING COUGH MORBIDITY**Edmonton, 1931-1947**

This disease has been characterized by a high peak of incidence every third year until Sauer-type vaccine was introduced in 1942. Since that time these peaks are markedly lowered and are farther apart. This has occurred during a period of rapid increase and overcrowding in our population.

Annual Report of the Medical Officer of Health

•

Chairman and Members,
Local Board of Health,
Edmonton, Alberta.

Herewith is submitted a report of the activities of our Board and certain related health agencies for 1947.

Birth Rate:

A birth rate of 32.3 marks a substantial increase over 1946. The total of 3,838 births is 18 per cent more than the number of babies born to our citizens the previous year. This increase has made itself felt in our Child Welfare and Immunization clinics, and in due time will present an additional problem for our schools and other institutions.

Death Rate:

The death rate from the three chief causes—heart disease, cancer, and intracranial lesions of vascular origin—showed a moderate reduction. This is encouraging, especially because in all these an upward trend has been evident in recent years. The reported deaths from pneumonia, however, the fourth greatest cause of death, showed an increased rate which is the highest in the past seven years. Having in mind the rather miraculous results from penicillin and the sulphonamide drugs in treatment of pneumonia, one must conclude that many of our citizens so afflicted are failing to seek medical care sufficiently early.

Automobile accidents accounted for seventeen deaths, the same as in 1946. Our only scant comfort is that these preventable deaths did not increase with our population.

Our infant mortality at thirty-two per thousand living births is amongst the lowest on this continent. Premature birth continues to be the greatest single cause of death in this group. Of the 123 deaths in this group, approximately one quarter were due to prematurity. Adequate pre-natal care is essential in avoiding this mishap, and this includes medical care early in pregnancy.

Communicable Diseases:

Although a considerable number of cases of poliomyelitis occurred in the surrounding district, none were reported within our city.

The increase noted in cases of tuberculosis was due chiefly to finding of early cases by the mass X-ray survey being carried on by the Provincial Health Department and the Alberta Tuberculosis Association. Many of these citizens were fortunate in having their condition identified at a stage when it can be remedied with a minimum of lost time and trouble. If all our citizens participate in this and future surveys, we may look forward to an effective control of this insidious disease.

Undulant fever showed a marked increase. A considerable number of cases occurred in the adjacent district and nine cases were reported in the city. Three of these latter were in packing plant workers, and the remainder appeared to acquire their infection through the consumption of raw milk.

Our immunization of children showed a marked increase. In this clinic 21,750 procedures were carried out. The number in attendance, chiefly children, was 6,546. The demonstrable saving of illness and death by these protective treatments marks them as one of our most satisfying efforts.

Child Welfare Clinic:

Attendance at this clinic increased to an all-time high of 11,950

children. It has been necessary to increase the number of clinic days and also the clinic staff to meet the added demand. We believe that supervision of babies and pre-school children given in this clinic and by home visits offers the greatest assurance of healthy bodies for this rising generation.

Sanitation:

Sanitary supervision of foodstuffs, whether in warehouses, markets or restaurants has been steadily increased, with increasing assurance for citizens against possibility of infection by this route.

Our milk supply, of a high standard in the past, was again threatened by short supply for a brief period late in the year. The reason for these periods of shortage appears to be an economic one, and would seem to be capable of solution by a willing effort of producers and distributors. We are determined that our citizens shall not be exposed to the hazard of milk introduced from unsafe sources at such periods.

The general sanitation and cleanliness of our city has shown considerable improvement. One happy result has been comment from citizens in many areas upon the absence of the disease carrying housefly. There are still, however, a number of fly-producing premises in the community, and every effort is being made to eliminate this condition.

General:

Many of our citizens are still unsatisfactorily housed. A substantial amount of new construction has failed to give proportionate relief in this matter because of our rapidly increasing population.

Hospital accommodation in our city continues to be crowded. Extensions at the Royal Alexandra and St. Joseph's Hospitals have provided some welcome relief in the care of aged infirm citizens.

We gratefully acknowledge the co-operation and assistance received from the Provincial Board of Health and the Provincial Laboratory in carrying on the work of the Local Board of Health.

Respectfully submitted,

G. M. LITTLE,

Medical Officer of Health.

EXPENDITURE

1. Salaries	\$ 47,175.70	\$ 38,868.41
2. Supplies	1,367.50	1,213.09
3. Transportation	5,634.23	5,846.06
4/6. Telephones, Sundries, Uniforms	1,435.28	1,261.24
7. Pensions	3,832.03	3,699.95
(Bathhouse included in Acct. 1 and 2.)		
	<u>\$ 59,444.74</u>	<u>\$ 50,888.75</u>

REVENUE

Permits	\$ 513.75	
Meat Inspection	1,311.10	
Prov. Govt. Grant	1,875.00	
License Dept.	1,500.00	
	<u>\$ 5,199.85</u>	
		<u>5,199.85</u>
		<u>2,987.35</u>
	<u>\$ 54,244.89</u>	<u>\$ 47,901.40</u>

EXPENDITURE—CLASSIFIED—1946

	Administration	Communicable Disease	Dairy Inspection	Food Inspection	Laboratory Service	Public Health Nursing	Sanitation	Vital Statistics	Bath House	TOTALS
1. Salaries.....	\$ 9,093.65	\$3,524.33	\$2,700.84	\$3,979.23	\$2,945.70	\$7,236.69	\$15,676.91	\$866.91	\$151.44	\$47,175.70
2. Supplies.....	783.16	104.47			87.19	238.63	17.52	25.65	110.88	1,367.50
3. Transportation.....	400.20	1,006.20	780.00	220.00	440.53	746.33	2,040.97			5,634.23
4. Telephones.....	110.85	65.76	19.27	17.76	20.64	43.31	82.20			359.79
5. Sundries.....	162.54	364.32		59.75	19.76	155.64	77.88			839.89
6. Uniforms.....				28.62		48.23	158.75			235.60
7. Pensions.....	3,832.03									3,832.03
	<u>\$14,382.43</u>	<u>5,065.08</u>	<u>3,500.11</u>	<u>4,305.36</u>	<u>4,513.82</u>	<u>\$8,468.83</u>	<u>\$18,054.23</u>	<u>\$892.56</u>	<u>\$262.32</u>	<u>\$59,444.74</u>
	24.1%	8.3%	5.7%	7.2%	7.5%	15.0%	30.3%	1.5%	.4%	

SUMMARY OF STATISTICS

Area of City, 26,778 acres including 1,000 acres of water and 2,147 acres in Parks.

	1947	1946	1945	1944	1943
Population.....	118,541	114,976	111,745	108,416	105,536
Persons per acre of land.....	4.4	4.2	4.1	4.0	3.9
Cost per capita.....	.45	.44	.41	.39	.38
School enrolment.....	19,071	18,988	17,714	17,623	17,337
Natural increase of population.....	2,920	2,283	1,831	1,622	1,629
Total births.....	6,019	5,455	4,726	4,286	4,083
Resident births, only.....	3,838	3,251	2,695	2,447	2,443
Rate per 1,000 population.....	32.3	28.2	24.1	22.6	23.1
Total stillbirths.....	100	82	83	61	67
Resident stillbirths only.....	62	51	53	39	33
Rate per 1,000 births.....	16.1	15.7	19.6	15.9	13.2
Total deaths.....	1,482	1,576	1,425	1,498	1,342
Resident deaths only.....	918	968	864	825	841
Rate per 1,000 population.....	7.7	8.4	7.7	7.5	7.7
Total deaths under 1 year of age.....	201	197	159	159	124
Resident deaths under 1 year of age.....	123	111	84	82	62
Rate per 1,000 living births.....	32.0	34.1	31.1	33.5	25.4
Maternal deaths (city only).....	1	5	6	3	4
Rate per 1,000 births.....	.27	1.5	2.2	1.2	1.6
Marriages.....	2,374	2,205	2,098	1,839	1,640
Rate per 1,000 population.....	20.02	19.1	18.8	17.4	17.6

VITAL STATISTICS

Births

	1947	1946
Total births	6,019	5,455
Resident births only	3,838	3,251
Male	2,008	1,699
Female	1,830	1,562
Attended by Physician	3,834	3,247
Attended by nurse	1	...
Unattended	3	4
Double births	39	30
Resident illegitimate births	145	...

Born in institutions—3,829 or 99.7%; born elsewhere—9.

Maternal Parentage:

	1947	1946
Canada	3,095 or 80.4%	2,732 or 84.1%
British Isles	473 or 13.2%	291 or 8.9%
Europe and Asia	161 or 4.2%	120 or 3.7%
U.S.A.	92 or 2.3%	94 or 2.9%
Other countries	17 or .4%	14 or .4%

Stillbirths

	1947	1946
Total stillbirths	109	82
Resident only	62	51
Male	31	28
Female	31	23
Born in institutions	62	51
Born elsewhere .....	...	...

Cause of Foetal deaths:

Dystocia	23	27
Prematurity	6	6
Toxaemia of pregnancy	5	2
Malformation	9	6
Placenta and membranes	8	1
Other conditions	10	9
Traumatism and overwork	1	...

Deaths

	1947	1946
Total deaths	1,482	1,576
Resident deaths only	918	968
Male	553	595
Female	365	373

Racial Origin

	1947	1946
Canada	279 or 30.4%	327 or 33.8%
British Isles	355 or 38.6%	350 or 36.1%
Europe and Asia	196 or 21.4%	181 or 18.7%
U.S.A.	40 or 4.4%	61 or 6.4%
Others	48 or 5.2%	49 or 5.0%

INFANT MORTALITY

	1947	1946
Total deaths under 1 year	201	197
Resident deaths under 1 year of age	123	111
Male	72	70
Female	51	41
Infant mortality rate per 1,000 living births	32.0	34.1

INFANT MORTALITY, 1947

	SEX		BY MONTH												BY AGE										
	TOTAL	Male	Female	January	February	March	April	May	June	July	August	September	October	November	December	1st Day	1st Week	2nd Week	3rd Week	4th Week	Total Under 1 Month	1-3 Months	4-6 Months	7-9 Months	10-12 Months
9—Whooping cough	2	1	1			1					1												2		
13a—Pulmonary tuberculosis	1	1			1																		1		
22a—Other and unspecified generalized T.B.	1	1	1		1																		1	1	
38a—Chickenpox	1	1												1										1	2
64—Diseases of thymus gland	2	1	1			1	1																1	1	
73d—Other and unspecified anemias	2	1	1		1												1				1		1	1	
83a—Cerebral haemorrhage, convulsions	2	1	1																			1	1		
106c—Unspecified bronchitis	11	5	9	4	1	1			1			1		3	3							6	6	1	1
107—Bronchopneumonia	2	2			1							1		1								2			
108—Lobar pneumonia	1	1			1																				
109—Pneumonia, unspecified	2	2			1							1													
113—Pulmonary emphysema	18	10	8		2	1	1	1	1	1	1	2	2	5	1	1	1	3	2	8	1		4		
119a—Diarrhoea and enteritis	1	1																							
122a—Hernia	1	1																							
132—Nephritis (unspecified)	1	1																							
132—Cellulitis and infected oedema	1	1	1											1	1		1				1		1		
153—Septicaemia, multiple abscesses	1	1	1									1		1	1		1	1	1	1	1	1	1	1	
157a—Congenital hydrocephalus	5	2	3			1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	
157b—Spina bifida and meningocele	4	2	1			1			1		1										2	2			
157c—Congenital malformations of heart	3	3																			2	1			
157g—Congenital malformations of digestive system	1	1																			1				
157m—Other and unspecified congenital malformations	29	17	12	6	4	2	3	3	2	2	2	4	1	2	1	1	9	2		27	2				
159—Premature birth	3	3																			3				
160a—Intrauterine or spinal haemorrhage	10	4	6	2	1	1	1	1	1	2	2		2			3	4	1			8	2			
160c—Other injuries at birth	5	4	1			3										3	1				4	1			
161a—Asphyxia—atelectasis	4	3	1																		4				
161c—Erythroblastosis fetalis	5	4	1									1		1			3			1	4	2	1	1	1
196d—Asphyxiation—obstruction—suffocation	1	1																							
200a—Ill defined—cause unknown	1	1																			1				
TOTAL	123	72	51	15	14	8	13	11	7	3	10	7	9	16	10	26	25	10	3	3	67	26	19	7	4

LOCAL BOARD OF HEALTH

ABRIDGED INTERNATIONAL CLASSIFICATION OF CAUSES OF DEATH, 1947 (Continued)

	Total	M	F	Under-18	1	2	3	4	5	9	10	14	15	19	20	24	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
28. Other diseases of the respiratory system.....	M 11	7	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	2	...	...	...	...	...	...	...	...	...
29. Diarrhea and Enteritis.....	M 20	12	8	10	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30. Appendicitis.....	M 2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31. Diseases of liver and biliary passages.....	M 12	5	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
32. Other diseases of digestive system.....	M 23	16	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
33. Nephritis.....	M 27	11	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
34. Other diseases of urinary and genital systems.....	M 14	10	16	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
35. Puerperal infection.....	M 1	1	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
37. Diseases of the skin, cellular tissue, bones organs of movement.....	M 3	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38. Congenital malformations, and debility, premature birth, diseases peculiar to the first year of life.....	M 66	42	24	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39. Senility.....	M 11	3	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40. Suicide.....	M 8	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42. Automobile accidents (all motor driven road vehicles).....	M 17	16	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43. Other violent deaths.....	M 29	22	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
44. Ill-defined, unknown, or unspecified.....	M 2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Male.....	553	...	72	4	1	3	2	6	1	...	5	11	6	14	15	19	22	37	75	64	87	47	38	19	5	...	...	...	...	...	...	...
Total Female.....	365	51	1	2	1	...	...	...	...	...	2	2	6	6	3	6	9	21	13	28	31	29	48	34	33	29	2	2	...	...	...	...
Total Deaths.....	918	553	365	123	6	3	4	2	8	3	6	11	14	12	20	24	40	35	65	106	93	135	81	71	48	7	2	...	...	...	...	...

PRINCIPAL CAUSES OF DEATH—1947

		1947					1946				
		Total	Male	Female	% of Total Deaths	Rate per 100M Population	Total	Male	Female	% of Total Deaths	Rate per 100M Population
90—95	Diseases of the heart.....	260	168	92	25.9	219.3	262	162	100	27.0	227.8
45—55	Cancer and other malignant tumors	143	81	62	15.5	120.6	146	82	64	15.1	126.9
83—	Intracranial lesions of vascular origin	85	43	42	9.2	71.7	97	55	42	10.0	84.3
157—161	Congenital debility, premature birth, diseases peculiar to first year of life.....	66	42	24	7.1	55.6	76	51	25	7.8	66.0
107—109	Pneumonia and Bronchopneumonia	56	33	23	6.1	47.2	49	34	15	5.0	42.6
163—198	External causes.....	56	46	10	6.1	47.2	83	61	19	8.3	72.2
13—22	Tuberculosis, all forms.....	28	13	15	3.0	23.6	30	13	17	3.0	26.0
119—120	Diarrhea and enteritis.....	20	12	8	2.1	16.9	18	9	9	1.8	15.6
61	Diabetes mellitus.....	14	7	7	1.5	10.0	12	5	7	1.2	9.1
162	Senility	11	3	8	1.1	9.5	20	10	10	2.0	17.4
		739	448	291	80.5						

MORTALITY FROM HEART DISEASE

Year	Total Deaths	Deaths From Heart Disease	Percentage of Total Deaths	Rate per 100M Population
1947.....	918	260	25.9	219.3
1946.....	968	262	27.0	227.8
1945.....	864	232	26.8	207.6
1944.....	825	199	24.1	183.5
1943.....	814	202	24.8	191.4

MORTALITY FROM CANCER

Year	Total Deaths	Deaths From Cancer	Percentage of Total Deaths	Rate per 100M Population
1947.....	918	143	15.5	120.6
1946.....	968	146	15.1	126.9
1945.....	864	148	17.1	132.4
1944.....	825	132	16.0	121.7
1943.....	814	121	15.0	114.7

MORTALITY FROM INTRACRANIAL LESIONS OF VASCULAR ORIGIN

Year	Total Deaths	Deaths From This Cause	Percentage of Total Deaths	Rate per 100M Population
1947.....	918	85	9.2	71.7
1946.....	968	97	10.0	84.3
1945.....	864	93	10.7	83.2
1944.....	825	84	10.1	77.5
1943.....	814	74	9.0	70.4

MORTALITY FROM PNEUMONIA

Year	Total Deaths	Deaths From Pneumonia	Percentage of Total Deaths	Rate per 100M Population
1947.....	918	56	6.1	47.2
1946.....	968	49	5.0	42.6
1945.....	864	43	4.9	39.3
1944.....	825	41	4.9	37.8
1943.....	814	47	5.8	44.5

MORTALITY FROM TUBERCULOSIS

Year	Total Deaths	Deaths From Tuberculosis	Percentage of Total Deaths	Rate per 100M Population
1947.....	918	28	3.0	23.6
1946.....	968	30	3.0	26.0
1945.....	864	28	3.2	25.0
1944.....	825	26	3.1	23.9
1943.....	814	20	2.4	18.9

MORTALITY FROM EXTERNAL CAUSES

Year	Total Deaths	Deaths From External Causes	Male	Female	Suicide	Homicide	Automobile Accidents	Other Accidents	Percentage of Deaths	Rate Per 100M Population
1947	918	56	46	10	8	....	17	31	6.1	47.2
1946	968	83	64	19	25	1	17	40	8.3	72.2
1945	864	59	42	17	9	....	11	39	6.8	52.8
1944	825	40	31	9	9	....	9	22	4.8	36.8
1943	814	51	40	11	5	....	13	33	6.2	48.3

ISOLATION HOSPITAL

Four hundred and eighty-four patients were admitted, 47 were carried over from 1946 making a total of 541. There were 461 discharged, 25 died and 23 remained in the hospital at the end of the year.

The diseases hospitalized included:

Scarlet Fever	86	Encephalitis	5
Diphtheria	10	Erysipelas	28
Diphtheria Suspects	6	Undulant Fever	1
Diphtheria Carriers	10	Chickenpox	19
Poliomyelitis	13	Measles	31
Poliomyelitis Suspects	18	Mumps	21
Meningitis (meningococcic)	6	Rubella	4
Meningitis (tuberculosis)	7	Vincent's Angina	7
Tuberculosis	55	Whooping Cough	50
Typhoid Fever	3	Septic Sore Throat	2
Typhoid Fever suspects	2	Syphilis	3
Paratyphoid	1	G. C. Ophthalmia	24
Infectious Mononucleosis	5	Influenza	7
		Others	115

The deaths included:

Diphtheria	2	Whooping Cough	4
Encephalitis	1	Chickenpox	1
Meningitis (tuberculosis)	7	Tuberculosis	7
		Others	3

SCHOOL MEDICAL SERVICES

	Public School Board	R.C. Separate School Board
Complete examinations	5,650	622
Number reported with defects	2,248	92
Number reported without defects	6,701	530
Parents present at examinations	3,172	279
Homes visited by nurses	556	140
Talks to classes	208	8

IMMUNIZATION

	Smallpox	Diphtheria	Scarlet Fever	Whooping Cough	Typhoid Fever	Tetanus	Typhus	Cholera	Plague	Schick Test	Dick Test
1947											
Board of Health (cases).....	1157	2718	483	2858	56	100	1	1	....	80	107
Board of Health (doses).....	1157	8279	2030	9748	171	361	2	2	....	80	107
Public School Board (cases).....	1769	2194	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public School Board (doses).....	1769	3473	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (cases).....	303	268	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (doses).....	303	791	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total cases	3229	5480	483	2858	56	100	1	1	.....	80	107
Materials distributed to											
Private Physicians	584	513	17	550	24	6	....	....	....	2	2
1946											
Board of Health (cases).....	1530	1300	401	1364	60	13	5	5	5	34	59
Board of Health (doses).....	1530	4031	2225	5090	190	45	10	10	10	34	59
Public School Board (cases).....	2244	2513	.....	.....	.....	.....	.....	.....	.....	.....	.....
Public School Board (doses).....	2244	4062	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (cases).....	284	181	.....	.....	.....	.....	.....	.....	.....	.....	.....
Separate School Board (doses).....	284	972	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Cases	4058	3994	401	1364	60	13	5	5	5	34	59
Materials distributed to											
Private Physicians	675	564	42	319	11	....	....	....	....	1	1

(No. clinics held—247—Total 15,243—Average attendance 61.7.)

COMMUNICABLE DISEASE, 1943-1947

	1947		1946		1945		1944		1943	
	C	D	C	D	C	D	C	D	C	D
Chickenpox.....	1463	1	934	...	1389	...	1793	...	745	...
Diphtheria.....	6	...	3	...	2	...	5	...	11	1
Diphtheria carriers.....	4	...	5	...	5	...	16	...	12	...
Dysentery.....	...	...	...	...	...	...	...	...	2	...
Encephalitis.....	3	1	4	2	1	...	...	...	3	...
Erysipelas.....	17	...	23	...	19	...	17	...	18	...
Influenza.....	2	...	6	...	2	...	6	...	11	...
Hepatitis (infectious).....	1	...	...	...	...	...	...	...	...	...
Jaundice (infectious).....	1	...	...	...	...	...	...	...	...	...
Malaria.....	3	...	...	...	...	...	...	...	...	...
Measles.....	925	...	2563	1	444	...	2420	...	1926	1
Meningitis (Meningococcic).....	2	...	4	...	4	...	3	2	9	2
Mononucleosis (infectious).....	1	...	...	...	...	...	1	...	...	...
Mumps.....	300	...	1378	...	1880	...	397	...	1076	...
Paratyphoid.....	1	...	1	...	...	...	1	...	1	...
Poliomyelitis.....	...	...	8	...	...	...	5	...	7	...
Pneumonia (lobar).....	5	...	1	8	2	15	9	...	11	...
Puerperal Septicaemia.....	...	...	...	...	...	...	1	...	...	...
Rubella.....	87	...	183	...	277	...	77	...	330	...
Scarlet Fever.....	79	...	173	...	374	...	1010	1	513	1
Septic Sore Throat.....	1	...	2	...	7	...	4	...	8	...
Tuberculosis (Pulmonary).....	98	20	78	20	64	26	69	20	133	15
Tuberculosis (other forms).....	5	8	2	10	...	2	2	6	4	5
Typhoid Fever.....	...	...	...	...	2	...	...	...	1	...
Undulant Fever.....	9	...	2	...	3	...	1	...	...	...
Vincent's Angina.....	7	...	7	...	28	1	20	...	1	...
Whooping Cough.....	628	2	92	...	237	...	222	2	856	2
Venereal Disease—										
Gonorrhoea.....	666	...	624	...	479	...	308	...	209	...
G. C. Vaginitis.....	8	...	3	...	12	...	4	...	4	...
Syphilis.....	104	5	81	4	108	5	74	6	38	7
Type Undetermined.....	4	...	12	...	5	...	...	...	...	...
	4423	48	6201	51	5341	53	6449	53	5908	57
Morbidity per 1,000 population.....	37.2		53.9		47.6		60.3		56.0	

C—Cases.
D—Deaths.

During 1947 reportable diseases were responsible for 48 or 5.2% of the 918 City deaths.

Of the 48 deaths from communicable disease, 37 were over 19 years of age, and 28 were due to all forms of Tuberculosis. 5 died from Syphilis.

Of the 4,423 cases of communicable disease, 1,463 or 33.0% were due to Chickenpox; 925 or 20.9% were due to Measles. Whooping cough accounted for 628 cases or 16.4%. There were 79 cases of Scarlet Fever or 1.8% of the total number of communicable diseases reported.

	No. of Cases	Percent of Cases	No. of Deaths	Percent of Deaths
Pre-school cases—1 to 5 years.....	1344	30.4	9	18.7%
School cases—6 to 14 years.....	1873	42.3	2	4.2
Over 15	1107	25.0	37	77.1
Age not stated	97	2.2	...	...
Armed Forces	2	.1	...	...

COMMUNICABLE DISEASE BY AGE, 1947

	City Cases	Male	Female	Under 1	1/4	5/14	15/19	Over 20	Not Armed Outside Stated Forces Cases	2
Actinomycosis.....	1463	751	712	73	380	884	39	58	29	2
Chickenpox.....	6	2	4	1	3	2	.....	.....	.....	6
Diphtheria.....	4	1	3	1	2	.....	.....	.....	.....	6
Diphtheria carriers.....	3	3	.....	.....	1	.....	.....	.....	.....	8
Encephalitis.....	17	10	7	.....	1	.....	1	15	.....	9
Erysipelas.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Infectious Hepatitis.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Infectious Jaundice.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Infectious Mononucleosis.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Malaria.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....
Measles.....	925	458	467	64	393	424	17	19	8	17
Meningitis (Meningococci).....	2	1	1	1	.....	.....	.....	.....	.....	6
Mumps.....	300	155	145	7	57	153	24	49	8	12
Paratyphoid.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Polioomyelitis.....	38	49	.....	6	29	35	7	.....	.....	14
Rubella.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Scarlet Sore Throat.....	79	39	40	.....	19	41	10	8	1	19
Tuberculosis (Pulmonary).....	98	37	61	.....	2	8	10	61	22	27
Tuberculosis (other forms).....	5	4	1	.....	2	1	.....	.....	.....	4
Typhoid Fever.....	9	9	.....	.....	.....	.....	.....	.....	.....	3
Undulant Fever.....	7	4	3	.....	.....	.....	.....	.....	.....	6
Vincent's Angina.....	628	324	304	88	211	322	1	3	1	4
Whooping Cough.....	.....	.....	.....	.....	.....	.....	4	2	1	13
Veneral Disease—										
Gonorrhoea.....	666	474	192	1	.....	1	81	566	17	12
G. C. Vaginitis.....	8	.....	8	1	.....	1	6	.....	.....	.....
Syphilis.....	104	53	51	1	.....	.....	17	83	3	2
Type Undetermined.....	4	.....	4	.....	.....	.....	.....	2	.....	.....
TOTALS.....	4423	2369	2054	244	1100	1873	219	888	97	2

DEATHS:

Chickenpox.....	1	.....	1	1	.....	.....	.....	.....	.....	.....
Encephalitis.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Influenza.....	2	2	.....	.....	.....	.....	.....	1	.....	.....
Pneumonia (lobar).....	9	7	2	2	.....	.....	.....	2	.....	.....
Syphilis.....	5	4	1	.....	.....	.....	.....	7	.....	.....
Tuberculosis (pulmonary).....	20	10	10	1	.....	1	.....	5	.....	.....
Tuberculosis (other forms).....	8	3	5	1	2	1	.....	18	.....	.....
Whooping Cough.....	2	1	1	2	.....	.....	.....	4	.....	.....
TOTALS.....	48	27	21	7	2	2	.....	37	.....	.....

COMMUNICABLE DISEASE BY SEASON AND SEX, 1947

City	Male	Female	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Outside Cases
Actinomyces.....	1463	751	712	173	243	205	173	85	132	112	34	29	64	128	85
Chickenpox.....	6	2	4	.....	.....	.....	2	.....	.....	1	.....	.....	3	.....	6
Diphtheria.....	4	1	3	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	5
Diphtheria carriers.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	6
Encephalitis.....	17	10	7	1	.....	.....	.....	4	1	2	3	.....	3	1	3
Erysipelas.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	9
Infectious Hepatitis.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Infectious Jaundice.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Infectious Mononucleosis.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Malaria.....	925	458	467	114	239	398	34	35	46	30	37	15	5	16	17
Mumps.....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Meningitis (Meningococci).....	300	155	145	83	36	38	14	5	17	17	9	11	27	34	12
Paratyphoid.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
Poliomyelitis.....	87	38	49	12	7	10	5	4	9	2	9	6	4	12	7
Rubella.....	79	39	40	4	5	2	2	8	9	5	9	5	5	12	13
Scarlet Fever.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
Septic Sore Throat.....	98	37	61	4	8	25	4	7	5	12	6	6	12	4	1
Tuberculosis (Pulmonary).....	5	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27
Tuberculosis (other forms).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Typhoid Fever.....	9	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Undulant Fever.....	7	4	3	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Vincent's Angina.....	628	324	304	13	18	19	41	36	48	65	76	47	64	99	102
Whooping Cough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
Veneral Disease—															
Gonorrhoea.....	666	474	192	62	42	37	47	47	49	53	57	53	82	83	54
G. C. Vaginitis.....	104	53	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
Syphilis.....	104	53	61	4	12	5	13	10	4	7	7	13	12	12	5
Type Undetermined.....	4	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
TOTALS.....	1423	2369	2054	471	615	683	338	242	321	310	251	190	270	398	333
DEATHS:															
Chickenpox.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Encephalitis.....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Influenza.....	6	7	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pneumonia (lobar).....	5	4	1	.....	.....	.....	1	1	1	.....	.....	.....	2	1	1
Syphilis.....	20	10	10	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (pulmonary).....	8	3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tuberculosis (other forms).....	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whooping Cough.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TOTALS.....	48	27	21	4	4	7	6	3	1	2	2	5	3	6	5

TUBERCULOSIS CONTROL

Kinsmen's Club Service:	1947	1946
Total visits by nurse	3098	3196
Visits to T.B. cases	821	741
Visits to suspect cases.....	117	134
Visits to contact cases	2001	2125
Not seen, moved, etc.	48	50
Co-operative visits	111	146

Provincial Tuberculosis Division:

Examinations—

Active cases	85	119
Suspects	128	167
Contacts	637	511
Non contacts	925	1069
Total examinations	3174	2883
Total X-Rays	2924	2731
Tuberculin tests made	1718	1598
Tuberculin tests, positive	638	575
Mobile X-Ray clinic	25669	8138



PUBLIC HEALTH NURSING

New admissions numbered 3,175 which is 869 above last years admissions. 1740 were discharged due to school-age or non attendance and 13 died.

Home visits numbering 1,892 were made to very young babies and to those with problems.

Dr. Mildred Newell and Dr. Margaret Collins were in attendance at 82 clinics and saw 1,142 children.

During the year we had 25 B.Sc. and Public Health Nurses from the University of Alberta with us for observation at clinics and home visiting and 56 student nurses from the Outdoor Clinic and Royal Alexandra hospital attended the clinic for observation.

	1947	1946	1945	1944	1943
Number of clinics held	240	200	200	200	150
Babies in attendance (under 1 year).....	10260	.....	.....	.....	.....
Pre-school in attendance	1690	.....	.....	.....	.....
Total attendance	11950	8167	7420	7356	6716
Average attendance	50	41	37	37	45
New cases admitted, babies	2564	1881	1523	1378	1320
New cases admitted, over 1 year.....	611	328	281	262	240
Babies referred to family doctor	107	31	25	45	67
Children re-admitted	109	97	91	92	.....

VICTORIAN ORDER OF NURSES

	1947	1946	1945	1944	1943
Pre-natal visits	171	198	422	545	347
Obstetrical (nursing care)	11	0	8	19	87
Obstetrical (advice)	1447	1333	1182	1147	1157
Newborn (nursing care)	754	657	559	666	743
Newborn (health supervision)	1303	1796	1654	1373	1287
Pre-natal clinics	50	59	51	49	46
Total attendance	528	577	768	982	658
Average attendance	10	12	15	20	14
Mothers enrolled	114	115	136	.....	.....

HEALTH INSPECTIONS

●

INSPECTIONS:

	1947	1946
Dwellings	1,291	1,048
Hotels, lodging houses, apartment blocks.....	232	936
Schools, blocks, public buildings	7	15
Stores, business establishments	141	769
Food handling establishments	4,127	2,948
Garbage cans, etc.	528	903
Streets, lanes, yards, dumps, etc.	511	924
Miscellaneous	2,120	2,662
	8,957	10,205

Re-inspections	375	571
Visits assisting quarantine officer	304	860

NOTICES:

Written	438	819
Verbal	1,341	2,464
Garbage	289	491

COMPLAINTS:

Received from public	626	648
Justified	560	601
Received from other departments	17	10
Referred to other departments	88	74

The complaints were made up as follows:

Garbage, streets, lanes, etc.	219	233
Vermin	38	65
Housing, plumbing and drainage	241	230
Food and drink	46	40
Miscellaneous	81	80

LICENSES:

License applications investigated.....	2,669	2,660
--	-------	-------

PLUMBING:

Sewer and water notices issued	10	9
Sewer and water installed, buildings removed, etc.....	30	14
Extension of time granted	21	20
Plumbing permits issued	1,473	1,603
Plumbing permits issued for old buildings	34	33
Alterations to existing plumbing (fixtures).....	540	631
Privies eliminated through installation of plumbing.....	34	33
Number of septic tanks installed.....	6	8

DISINFESTING STATION:

	1947	1946
Baths	3,241	3,797
Verminous	5	7
Scabies	328	413
Disinfested	332	413
No. of Men Washing Clothes	2,196	2,564
Units Washed	6,588	7,743
Articles sterilized for the Army .....	...	65

SCAVENGING CLEAN-UP WORK

Refuse removed during Clean-up Week (cubic yards).....	8,400	10,850
--	-------	--------

ANIMALS, BARNs, STYEs:

Cow owners	371	389
Hog owners	79	89
Goat owners	31	39
Fur Farm owners	84	84

FOOD:

Samples submitted to Provincial Laboratory	54	25
Foodstuffs condemned (lbs.)	2,145	279,710

WATER:

Water samples taken	20	23
Negative	4	11
*Positive	8	11
*Suspicious	4	1
Wells chlorinated	6	3
Wells placarded	1	2
Ice Samples	1	1
Rinse water samples	79	...

*—Wells condemned or further samples taken after chlorination.

HOUSING:

Vermin, overcrowding and other insanitary conditions were checked in 1,291 dwellings and 232 hotels, lodging houses, apartment blocks, etc. Necessary notices were issued.

POISON GAS FUMIGATION:

Hydrocyanic acid gas was used in the fumigation of thirty establishments.

ENFORCEMENT OF REGULATIONS:

Prosecutions
--------------------	-----	-----

FOOD INSPECTION

MEATS INSPECTED AND CONDEMNED

Beef:

	1947	1946	1945
No. of carcasses inspected	3,942	3,026	2,623
Carcasses condemned	7	10	37
Portions condemned	385	249	189
Weight (lbs.) of carcasses and portions condemned....	9,390	8,675	19,960

Veal:

No. of carcasses inspected	2,953	2,275	2,075
Carcasses condemned	4	2	3
Portions condemned	64	49	32
Weight (lbs.) of carcasses and portions condemned....	1,690	940	1,245

Mutton:

No. of carcasses inspected	912	1,348	1,634
Carcasses condemned	9	3	13
Portions condemned	50	65	59
Weight (lbs.) of carcasses and portions condemned....	650	270	815

Pork:

No. of carcasses inspected	5,699	3,304	4,656
Carcasses condemned	58	65	58
Portions condemned	1,965	986	1,399
Weight (lbs.) of carcasses and portions condemned....	35,535	24,765	28,305

Totals:

No. of carcasses inspected	13,506	9,953	10,988
Carcasses condemned	78	80	111
Portions condemned	2,464	1,349	1,679
Weight (lbs.) of carcasses and portions condemned....	47,265	34,650	50,325

CARCASSES FOUND TO BE INFECTED WITH T.B.

Beef:

Infected	16	11	13
Percent .....	.406	.363	.495

Pork:

Infected	1,128	565	712
Percent	19.77	17.10	15.29

CHIEF CAUSES OF CONDEMNATION, 1947

Beef:

	Carcasses	Portions	Weight Lbs.
Abscess .....	...	126	1,470
Abscess multiple	1	...	450
Actinomyces .....	...	141	2,615
Adhesions .....	...	36	525
Bruised	4	5	2,130
Tuberculosis .....	...	20	350
Pneumonia	2	...	975
Miscellaneous (contamination, parasites, jaundice, congestion) .....	...	57	875
	7	385	9,390

Veal:	Carcasses	Portions	Weight Lbs.
Abscess	1	22	455
Actinomycosis .....	.....	9	135
Bruised	1	.....	300
Parasites .....	.....	20	205
Tuberculosis	1	2	310
Arthritis	1	.....	175
Miscellaneous (adhesions, jaundice) .....	.....	11	110
	<hr/> 4	<hr/> 64	<hr/> 1,690

Mutton:

Abscess multiple	3	.....	200
Actinomycosis	1	.....	55
Not bled	3	.....	175
Peritonitis	1	.....	60
Miscellaneous (bruised, emaciation, parasites, adhesions)	1	50	160
	<hr/> 9	<hr/> 50	<hr/> 650

Pork:

Abscess	1	18	455
Abscess multiple	16	.....	3,045
Adhesions	3	114	2,160
Arthritis	8	.....	1,350
Bruised	4	51	2,115
Contamination .....	.....	122	1,895
Peritonitis	6	.....	1,200
Pneumonia	7	1	1,275
Tuberculosis	10	1,357	21,015
Miscellaneous (haem. septicaemia, parasites, rhinitis)	3	302	1,025
	<hr/> 58	<hr/> 1,965	<hr/> 35,535

DISEASED ANIMALS

	1947	1946	1945
Beef	329	227	164
Veal	63	38	26
Mutton	37	63	22
Pork	1,486	788	770
Total amount of meat condemned	47,265	34,650	50,325

FOODSTUFFS CONDEMNED BY INSPECTORS

Canned goods	43	111	15
Fruit and vegetables .....	.....	3	154
Meat	140	256	.....
Fish .....	.....	.....	1,140
Poultry	167	198	250
Cheese .....	.....	2	.....
Damaged by Fire	1,789	279,133	.....
Sundries	6	7	29
	<hr/> 2,145	<hr/> 279,710	<hr/> 2,863
Total (lbs.)	2,145	279,710	2,863

DAIRY INSPECTION

•

1947

Certificates issued Producer-distributors, raw milk	10
Certificates issued Producer-shippers, milk	302
Certificates issued Pasteurization plants	5
Inspection of producer-distributors' Dairies	55
Inspection of Producer-shippers' Dairies	1,101
Inspection of Pasteurization plants	60
New dairy barns erected	20
Dairy Barns remodelled	2
New Milk Houses erected	22
Certificates suspended temporarily	356
Certificates suspended indefinitely .....	...
Applications for certificates of registration refused .....	...
Certificates issued to retail distributors	467
Permits issued to cow keepers in the city.....	371
Educational circulars to milk and cream producer-distributors.....	758

Since the latter part of 1946, the number of producer-distributors of raw milk has decreased from fifteen to ten, and 95 per cent of the Edmonton milk supply is now pasteurized.

Routine inspection of all dairy farms in the milk shed is maintained, and all possible assistance is given where the dairy farmer may be having difficulty in meeting our standards.

•

LABORATORY REPORT

•

The number of retail bottled samples taken during the year either from delivery wagons or at the plants was 523. These samples were examined for butterfat content, solids-not-fat, sediment and flavor. Methylene blue tests were also run on them. Over half the samples were submitted to test for bacteria count and all those exceeding 50,000 given a re-test as soon as possible. The pasteurized milk was also tested at least twice a month by means of the phosphatase test to ensure adequacy of pasteurization. The results of these tests are shown in tabular form.

In the first table the bacterial results of all retail samples are classified. The ten examinations which were spoiled by the growth of spreaders are excluded in arriving at the proportion in each group.

Table No. 1, Retail Milk Samples—Bacteria Counts

	Below 15,000	15,000/ 40,000	40,000/ 100,000	100,000/ 300,000	Over 300,000	Spreader	Total
January	27	7	4	....	....	....	38
February	25	8	1	1	2	2	39
March	14	6	5	1	....	....	26
April	16	12	11	6	....	....	45
May	8	9	6	9	....	1	33
June	20	10	9	4	1	3	47
July	21	8	11	3	1	1	45
August	24	12	11	2	1	....	50
September	34	8	12	2	2	1	59
October	12	15	4	2	2	—	35
November	22	16	12	1	3	2	56
December	21	11	11	4	3	—	50
	244	122	97	35	15	10	523
Percentage.....	46.6	23.3	18.6	6.7	2.9	1.9	

Table No. 2

	Below 15,000	15,000/ 40,000	40,000/ 100,000	100,000/ 300,000	Over 300,000	Spreader	Total
Raw Milk.....	44-21.2%	61-29.5%	64-31.5%	23-11.1%	14-6.7 %	4	210
Pasteurized	102-65.8	26-16.8	20-12.9	6- 3.9	1- .63	2	157
Jersey	36-56.2	19-29.8	6-10.6	1- 1.5	2-3.1	....	64
Homogenized	62-69.8	15-16.8	7- 7.8	4- 4.5	1-1.1	3	92
	244	121	97	34	18	9	523

In addition to the retail samples special samples were taken chiefly for the Canadian National Railway and examined for butterfat and bacteria count and occasionally for coliform organisms. The results of these along with the butterfats, sediment tests and other tests of these and the retail samples are shown in tables 3 and 4.

Table No. 3

	Number	Average
Retail samples, butterfat	673	3.88%
Retail samples, solids not fat	673	8.63%
Retail samples, sediment	672	8.3 %
Special creams—butterfat	34	12.45%
Special milks—butterfat	36	3.1 %
Chocolate Milks, butterfat	76	1.88%
Phosphatase tests	354	

Table No. 4, Bacteria Counts—Special Milks and Creams

Special Creams	52-36	under 15,000	per c.c.
Special Milks	68-39	under 15,000	per c.c.
Chocolate Milks	76-58	under 15,000	per c.c.
Ice Cream	65-59	under 15,000	per c.c.
Rinse Bottles	2		
Special Milks for coliform organisms	142		

The testing of the raw milk as received at the dairies has demanded increasing time. The milk collecting service and the pasteurization plants are still working under a very considerable handicap due to overloading which interferes with the getting of the samples promptly and regularly. About thirteen thousand samples were tested in addition to roughly two thousand checked by the dairies themselves during the illness of our chemist. The results shown are some improvement over the previous year, but the number of samples failing to reach our standard (835) is still much higher than normal for previous years. It has been our aim to help the farmers as much as possible to improve their product, and in this connection we ran over one hundred special samples to help them in locating the source of their trouble.

Table No. 5—Methylene Blue Tests

	Number	Under 5½ Hours
Producer's Milk	12,925	835
Retail Samples	673	.....
Special Tests	102	.....

Regular inspection and supervision of the swimming pools, both City owned and private was carried on throughout the year. Test solutions and apparatus were supplied for their use, and samples routinely taken for examination besides various tests carried on at the pools. Of the 228 samples taken for bacteria count 172 were from the City and 56 from private pools. Of these, 32 gave counts of over 200 per c.c.; 20 from the City pools and 12 from the private ones. Ten samples showed the presence of coliform organisms, four from the city pools. In comparing these results with those of previous years it must be noted that in accordance with modern practice larger samples are now taken than formerly for this test both for swimming pool and tap water.

Of the 297 examinations of samples of tap water at the provincial laboratory one was spoiled by growth of spreaders and only two gave counts over 50. Eight samples showed the presence of coliform organisms. It was decided after investigation that five of these positive tests, all taken within a week, did not reflect the condition of our general water supply but were entirely due to local conditions close to point of sampling.

Considerable other work of a more general nature was also done, mostly in connection with work of the sanitary inspectors, and included such odds and ends as testing of various detergent solutions, checking and testing of dish washing machines, testing and advising with regard to fumigation agents, taking samples for analysis of gas collecting in a hot water heating system, making humidity determinations as required and in general such other tests as would aid in the work of the department or city.

General supervision was also given to the water precipitation and sewage treatment plants. Chlorine tests were made almost daily on the tap water and closest collaboration maintained at all times with the staff of the water treating plant.

